

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: xx.28**WELDING INSPECTION REPORT**

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-029385
Date Inspected: 04-Apr-2013

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor:

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: On Site

CWI Name:	N/A	CWI Present:	Yes	No
Inspected CWI report:	Yes No N/A	Rod Oven in Use:	Yes No N/A	
Electrode to specification:	Yes No N/A	Weld Procedures Followed:	Yes No N/A	
Qualified Welders:	Yes No N/A	Verified Joint Fit-up:	Yes No N/A	
Approved Drawings:	Yes No N/A	Approved WPS:	Yes No N/A	
		Delayed / Cancelled:	Yes No N/A	
Bridge No:	34-0006	Component:	Tower Electroslag Welds	

Summary of Items Observed:

The Caltrans OSM Quality Assurance (QA) Inspector Art Peterson was present during the times noted above to perform ultrasonic inspection verification on Electroslag welds inside of the Tower. The purpose of the ultrasonic inspection was for the detection of planar indications utilizing both the pulse echo (PE) technique and the pitch and catch (PC) technique for further discontinuity evaluation in the middle half of the material thickness on electroslag welds where previous discontinuities were detected by the single pulse echo search unit. The data collected from utilizing the pitch and catch technique is for information only and the ultrasonic test (UT) inspection was performed as a joint inspection with ABF/JV Quality Control (QC) Smith Emery NDT personnel. The summary of the joint ultrasonic inspection performed on this date was as follows:

ABF Standard Reference Block: Top Quarter Notch, Middle Half Notch, and Side Drilled Hole.

ABF Quality Control NDT Inspector Jesse Cayabyab: Initial calibration off of IIW Block with (2) two Transducer cables plugged in the machine.

Transducer: Stresstel; 2.25 MHz

Top Quarter Notch: PE Decibel rating (+5) / PC Decibel rating (-15).

Middle Half Notch: PE Decibel rating (+3) / PC Decibel rating (-14).

Side Drilled Hole: PE Decibel rating (+1) / PC Decibel rating (+7).

ABF Standard Reference Block: Top Quarter Notch, Middle Half Notch, and Side Drilled Hole.

ABF Quality Control NDT Inspector Jesse Cayabyab: Initial calibration off of IIW Block with (2) two Transducer cables plugged in the machine.

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Transducer: Benchmark; 2.25 MHz

Top Quarter Notch: PE Decibel rating (-1) / PC Decibel rating (-13).

Middle Half Notch: PE Decibel rating (0) / PC Decibel rating (-18).

Side Drilled Hole: PE Decibel rating (-1) / PC Decibel rating (+1).

ABF Standard Reference Block: Top Quarter Notch, Middle Half Notch, and Side Drilled Hole.

Caltrans Quality Assurance NDT Inspector Art Peterson: Initial calibration off of IIW Block with (2) two Transducer cables plugged in the machine.

Transducer: Stresstel; 2.25 MHz

Top Quarter Notch: PE Decibel rating (+5) / PC Decibel rating (-27).

Middle Half Notch: PE Decibel rating (+2) / PC Decibel rating (-31).

Side Drilled Hole: PE Decibel rating (-1) / PC Decibel rating (-4).

ABF Standard Reference Block: Top Quarter Notch, Middle Half Notch, and Side Drilled Hole.

Caltrans Quality Assurance NDT Inspector Art Peterson: Initial calibration off of IIW Block with (2) two Transducer cables plugged in the machine.

Transducer: Benchmark; 2.25 MHz

Top Quarter Notch: PE Decibel rating (+6) / PC Decibel rating (-26).

Middle Half Notch: PE Decibel rating (+4) / PC Decibel rating (-28).

Side Drilled Hole: PE Decibel rating (+1) / PC Decibel rating (-4).

Summary of Conversations:

Only general conversations with ABF/JV QC NDT personnel regarding the ultrasonic inspection utilizing the pulse echo and pitch and catch technique on Electroslag welds inside of the Tower on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas, 916-764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Peterson, Art	Quality Assurance Inspector
Reviewed By:	Mertz, Robert	QA Reviewer
